What is claimed is:

1. In an oxidation inhibiting lubricant composition suitable for use in the manufacture of aluminum alloys comprising lubricant base selected from the group consisting of solid lubricants, liquid lubricants, grease lubricants, emulsion lubricants, and dispersion lubricants, the improvement wherein said lubricant composition further comprises: an effective amount of à fluorine-containing passivating compound.

2. The lubricant composition of claim 1 comprising about 0.1% to about 10% by weight of said fluorine containing passivating compound.

3. The lubricant composition of claim 1 comprising about 1% to about 8% by weight of said fluorine containing passivating compound.

4. The lubricant composition of claim 1 comprising about 3% to about 5% by weight of said fluorine containing passivating compound.

5. The lubricant composition of claim 1 wherein said passivating compound comprises an inorganic fluorine-containing compound.

6. The lubricant composition of claim 1 wherein said passivating compound comprises an organic fluorine-containing compound.

7. The lubricant composition of claim 1 comprising wherein said fluorine-containing passivating compound is selected from the group consisting of: ammonium hexafluozirconate, fluorinated carbon, sodium bifluoride, potassium bifluoride, magnesium fluoride, aluminum fluoride, sodium fluoride, calcium fluoride, sodium hexafluosilicate, sodium hexafluorophosphate, potassium zirconium fluoride, sodium fluoborate, tetradecafluorohexane, cryolite, polyhexafluoropropylene oxide, fluorinated ethylene propylene copolymer, perfluoroalkoxy polymers, poly(ethylene-co-tetrafluoroethylene), and polytetrafluoroethylene.

8. The lubricant composition of claim 1 sheared in a high speed mixing operation prior to use in the manufacture of aluminum alloys.

9. An oxidation inhibiting lubricant composition for use in the casting of aluminum alloys comprising: casting lubricant base selected from the group consisting of glycerol trioleate, ethyl oleate, methyl oleate, butyl ricinoleate, methyl acetyl ricinoleate, butyl oleate, glycerol triacetyl rincinoleate, butyl acetyl rincinoleate, polyalphaolefins, poly isobutlyenes, castor oil, peanut oil, corn oil, canola oil, cotton seed oil, olive oil, rapseed oil, safflower oil, sesame oil, sunflower oil, soybean oil, linseed oil, coconut oil,

palm kernel oil, neatsfoot oil, and combinations thereof, the improvement wherein said lubricant composition further comprises: adding an effective amount of a fluorine-containing passivating compound.

10. The lubricant composition of claim 9 comprising about 0.1% to about 10% by weight of said fluorine containing passivating compound.

11. The lubricant composition of claim 9 comprising about 1% to about 8% by weight of said fluorine containing passivating compound.

12. The lubricant composition of claim 9 comprising about 3% to about 5% by weight of said fluorine containing passivating compound.

13. The lubricant composition of claim 9 wherein said passivating compound comprises an inorganic fluorine-containing compound.

14. The lubricant composition of claim 9 wherein said passivating compound comprises an organic fluorine-containing compound.

15. The lubricant composition of claim 9 wherein said fluorine-containing passivating compound is selected from the group consisting of: ammonium hexafluozirconate, fluorinated carbon, sodium bifluoride, potassium bifluoride, magnesium fluoride, aluminum fluoride, sodium fluoride, calcium fluoride, sodium hexafluosilicate, sodium hexafluorophosphate, potassium zirconium fluoride, sodium fluoborate, tetradecafluorohexane, cryolite, polyhexafluoropropylene oxide, fluorinated ethylene propylene copolymer, perfluoroalkoxy polymers, poly(ethylene-co-tetrafluoroethylene), and polytetrafluoroethylene.

16. The lubricant composition of claim 9 sheared in a high speed mixing operation prior to use in the casting of aluminum alloys.

17. An oxidation inhibiting lubricant composition for use in the casting of aluminum alloys comprising: casting lubricant oil base selected from the group consisting of glycerol trioleate, ethyl oleate, methyl oleate, butyl ricinoleate, methyl acetyl ricinoleate, butyl oleate, glycerol triacetyl rincinoleate, butyl acetyl rincinoleate, castor oil, peanut oil, corn oil, canola oil, cotton seed oil, olive oil, rapseed oil, safflower oil, sesame oil, sunflower oil, soybean oil, linseed oil, coconut oil, palm kernel oil, neatsfoot oil, and combinations thereof, the improvement wherein said lubricant composition further comprises: an effective amount of a fluorine-containing passivating compound.

18. The lubricant composition of claim 17 comprising about 0.1% to about 10% by weight of said fluorine containing passivating compound.

19. The lubricant composition of claim 17 comprising about 1% to about 8% by weight of said fluorine containing passivating compound.

20. The lubricant composition of claim 17 comprising about 3% to about 5% by weight of said fluorine containing passivating compound.

21. The lubricant composition of claim 17 wherein said passivating compound comprises an inorganic fluorine-containing compound.

22. The lubricant composition of claim 17 wherein said passivating compound comprises an organic fluorine-containing compound.

23. The lubricant composition of claim 17 wherein said fluorine-containing passivating compound is selected from the group consisting of: ammonium hexafluozirconate, fluorinated carbon, sodium bifluoride, potassium bifluoride, magnesium fluoride, aluminum fluoride, sodium fluoride, calcium fluoride, sodium hexafluosilicate, sodium hexafluorophosphate, potassium zirconium fluoride, sodium fluoborate, tetradecafluorohexane, cryolite, polyhexafluoropropylene oxide, fluorinated ethylene propylene copolymer, perfluoroalkoxy polymers, poly(ethylene-co-tetrafluoroethylene), and polytetrafluoroethylene.

24. The lubricant of claim 17 sheared in a high speed mixing operation prior to use in the casting of aluminum alloys.

25. An oxidation inhibiting lubricant composition for use in the casting of aluminum alloys comprising: an existing casting lubricant oil base selected from the group consisting of glycerol trioleate, castor oil, and combinations thereof, the improvement wherein said lubricant composition further comprises: an effective amount of a fluorine-containing passivating compound.

26. The lubricant composition of claim 25 comprising about 0.1% to about 10% by weight of said fluorine containing passivating compound.

27. The lubricant composition of claim 26 comprising about 1% to about 8% by weight of said fluorine containing passivating compound.

28. The lubricant composition of claim 26 comprising about 3% to about 5% by weight of said fluorine containing passivating compound.

29. The lubricant composition of claim 26 wherein said passivating compound comprises an inorganic fluorine-containing compound.

30. The lubricant composition of claim 26 wherein said passivating compound comprises an organic fluorine-containing compound.

31. The lubricant composition of claim 26 wherein said fluorine-containing passivating compound is selected from the group consisting of: ammonium hexafluozirconate, fluorinated carbon, sodium bifluoride, potassium bifluoride, magnesium fluoride, aluminum fluoride, sodium fluoride, calcium fluoride, sodium hexafluosilicate, sodium fluoborate, sodium hexafluorophosphate, potassium zirconium fluoride, tetradecafluorohexane, cryolite, polyhexafluoropropylene oxide, fluorinated ethylene propylene copolymer, perfluoroalkoxy polymers, poly(ethylene-co-tetrafluoroethylene), and polytetrafluoroethylene.

32. The lubricant of claim 17 sheared in a high speed mixing operation prior to use in the casting of aluminum alloys.

33. An oxidation inhibiting lubricant composition for use in the casting of aluminum alloys comprising glycerol trioleate and about 1% to about 5% by weight of a fluorine-containing passivating compound.

34. The oxidation inhibiting lubricant composition of claim 33 wherein said fluorine containing passivating compound is selected from the group consisting of: ammonium hexafluozirconate, fluorinated carbon, sodium bifluoride, potassium bifluoride, magnesium fluoride, aluminum fluoride, sodium fluoride, calcium fluoride, sodium hexafluosilicate, sodium hexafluorophosphate, potassium zirconium fluoride, tetradecafluorohexane, cryolite, sodium fluoborate, polyhexafluoropropylene oxide, fluorinated ethylene propylene copolymer, perfluoroalkoxy polymers, poly(ethylene-co-tetrafluoroethylene), and polytetrafluoroethylene.

35. The lubricant of claim 34 sheared in a high speed mixing operation prior to use in the casting of aluminum alloys.

36. A process for the continuous casting of aluminum alloys wherein molten aluminum alloy is cast into a cooled mold having a lubricated inner mold wall, said process comprising the steps of:

a) lubricating an inner wall of a cooled, continuous casting mold with an oxidation inhibiting lubricant composition comprising:

i) a casting lubricant base selected from the group consisting of glycerol trioleate, ethyl oleate, methyl oleate, butyl ricinoleate, methyl acetyl ricinoleate, butyl oleate, glycerol triacetyl rincinoleate, butyl acetyl rincinoleate, polyalphaolefins, poly isobutlyenes, castor oil, peanut oil, corn oil, canola oil, cotton seed oil, olive oil, rapseed oil, safflower oil, sesame oil, sunflower oil, soybean oil, linseed oil, coconut oil, palm kernel oil, neatsfoot oil, and combinations thereof, and;

ii) an effective amount of a fluorine-containing passivating compound.

b) casting a molten aluminum alloy into said mold, whereby said oxidation inhibiting lubricant reduces the oxidation of said molten aluminum base alloy at the meniscus of said lubricated inner mold wall and said molten aluminum base alloy.

37. The oxidation inhibiting lubricant composition of claim 36 comprising about 0.1% to about 10% by weight of said fluorine containing passivating compound.

38. The oxidation inhibiting lubricant composition of claim 36 comprising about 1% to about 8% by weight of said fluorine containing passivating compound.

39. The oxidation inhibiting lubricant composition of claim 36 comprising about 3% to about 5% by weight of said fluorine containing passivating compound.

40. The oxidation inhibiting lubricant composition of claim 36 wherein said passivating compound comprises an inorganic fluorine-containing compound.

41. The oxidation inhibiting lubricant composition of claim 36 wherein said passivating compound comprises an organic fluorine-containing compound.

42. The oxidation inhibiting lubricant composition of claim 36 wherein said fluorine-containing passivating compound is selected from the group consisting of: ammonium hexafluozirconate, fluorinated carbon, sodium bifluoride, potassium bifluoride, magnesium fluoride, aluminum fluoride, sodium fluoride, calcium fluoride, sodium hexafluosilicate, sodium hexafluorophosphate, potassium zirconium fluoride, sodium fluoborate, tetradecafluorohexane, cryolite, polyhexafluoropropylene oxide, fluorinated ethylene propylene copolymer, perfluoroalkoxy polymers, poly(ethylene-co-tetrafluoroethylene), and polytetrafluoroethylene.

43. The lubricant of claim 36 sheared in a high speed mixing operation prior to use in the casting of aluminum alloys.